

## Exhibit 300: Capital Asset Summary

### Part I: Summary Information And Justification (All Capital Assets)

#### Section A: Overview & Summary Information

**Date Investment First Submitted:** 2009-06-30  
**Date of Last Change to Activities:** 2012-08-23  
**Investment Auto Submission Date:** 2012-02-24  
**Date of Last Investment Detail Update:** 2012-02-24  
**Date of Last Exhibit 300A Update:** 2012-08-23  
**Date of Last Revision:** 2012-08-23

**Agency:** 021 - Department of Transportation      **Bureau:** 12 - Federal Aviation Administration

**Investment Part Code:** 01

**Investment Category:** 00 - Agency Investments

**1. Name of this Investment:** FAAXX084: Instrument Flight Procedure Automation (IFPA)

**2. Unique Investment Identifier (Ull):** 021-002703942

#### Section B: Investment Detail

- Provide a brief summary of the investment, including a brief description of the related benefit to the mission delivery and management support areas, and the primary beneficiary(ies) of the investment. Include an explanation of any dependencies between this investment and other investments.**

IFPA is a suite of next generation Information Technology (IT) tools. These tools create products using fully integrated solutions for visual and instrument flight procedures. IFPA consists of the Instrument Procedure Development System (IPDS), Instrument Flight Procedures (IFP) database, Airports and Navigations Aids database (AirNav), Obstacle Evaluation (OE) system, and the Automated Procedures Tracking System (APTS). The IPDS tool is being developed in modules, with the first module providing space-based navigation (RNAV and RNP) procedure design capability. IPDS module two will provide ground-based navigation procedure design capability and the legacy design tool will be replaced and decommissioned. IPDS module deployments began in FY 2010 and continue through FY 2012. IFPA provides the following benefits: -- Capability for ongoing maintenance of over 21,000 instrument flight procedures in use at over 4,000 paved airports. -- Efficient response to Air Traffic Obstacle Evaluation (OE) requests, evaluating affects on instrument flight procedures, alleviating manual effort currently required for 50,000+ OE requests annually. In addition, application of TERPS rules as part of automated obstacle evaluation will be an important benefit. -- Conversion of legacy software to OMB, DOT and FAA recommended architecture, providing opportunities for improved integration as well as a foundation for anticipated flight procedure demand well beyond FY 2010. -- Capability to generate and integrate the necessary physical, temporal and spatial information needed to develop, inspect

and publish flight procedures as well as evaluate the impact of obstacles. This investment does not have system dependencies with other investments. However, IFPA does generate a digital product called the National Flight Database (NFD) that is made available to the EnRoute Automation (ERAM) program on an every 28-day publication cycle. The NFD contains international standard Aeronautical Radio Inc (ARINC) encoded instrument flight procedures and navigation aids.

**2. How does this investment close in part or in whole any identified performance gap in support of the mission delivery and management support areas? Include an assessment of the program impact if this investment isn't fully funded.**

IFPA supports 'Delivering Aviation Access through Innovation' as part of Destination 2025, by supporting Outcome 3, 'Air navigation infrastructure and associated systems are flexible, reliable, cost effective, and secure'. IFPA also supports: - Modernizing systems in support of both visual and instrument flight procedure development for the approach, departure, and en-route environments - Increasing automated capabilities for all types of precision and non-precision instrument flight procedures, utilizing both conventional ground-based navigation equipment and space-based navigation equipment, meeting requirements for Performance Based Navigation (PBN) using the Global Positioning System (GPS), Wide Area Augmentation System (WAAS) and Ground-based Augmentation System (GBAS). IFPA is a key component in evolving the National Airspace System (NAS) into a performance-based system. Such an evolution requires an investment in systems integration and the automation of aviation data for safety and reliability purposes, as well as an automated electronic means of information sharing. Commercial-Off-The-Shelf (COTS) workstations were deployed in FY 2008 to all flight procedure developers. The approved business case and baseline for IFPA provides for planned technology refreshes at regular intervals. In FY 2012, the program will begin the first of these technology refreshes. In addition, a major software vendor (Oracle) has ended support for a critical piece of COTS infrastructure software which underlies business process workflow for APTS, a critical AeroNav Products application. A reduction from the FY 2013 IFPA baseline funding would result in the program not being able to complete the purchase of COTS computers and servers planned for FY 2013, as well as delaying the COTS software upgrades and COTS business process workflow implementation. Any delay in tech refresh for IPDS COTS computers will impact the productivity of flight procedure developers. Any delay in the APTS workflow tech refresh will delay functionality needed for full partnership capability with the Department of Defense in the implementation of the IPDS tool.

**3. Provide a list of this investment's accomplishments in the prior year (PY), including projects or useful components/project segments completed, new functionality added, or operational efficiency achieved.**

In FY 2011, IPDS Module 2 Release 1 was delivered and entered Initial Operation Capability (IOC). The program also maintained performance efficiencies according to the schedule outlined in Exhibit 300-B Table C.1 (previously Table II.E.1).

**4. Provide a list of planned accomplishments for current year (CY) and budget year (BY).**

During FY 2012 Joint Application Design (JAD) sessions and technical architecture

configuration will be conducted to develop and implement business process workflows for AeroNav Products (AJV-3) using the FAA's newly acquired enterprise-wide workflow software (Progress Savvion). The APTS tool, which is built on Commercial Off The Shelf (COTS) software, also known as Commercially Available Software (CAS), will be re-designed, re-configured and re-implemented with the new FAA enterprise workflow solution. In FY 2013, technology refresh activities will include purchase and deployment of COTS workstations and servers, and a completed configuration of the phase one business process workflow conversion.

5. **Provide the date of the Charter establishing the required Integrated Program Team (IPT) for this investment. An IPT must always include, but is not limited to: a qualified fully-dedicated IT program manager, a contract specialist, an information technology specialist, a security specialist and a business process owner before OMB will approve this program investment budget. IT Program Manager, Business Process Owner and Contract Specialist must be Government Employees.**

2010-05-23

## Section C: Summary of Funding (Budget Authority for Capital Assets)

1.

Table I.C.1 Summary of Funding

	PY-1 & Prior	PY 2011	CY 2012	BY 2013
Planning Costs:	\$1.4	\$0.0	\$0.0	\$0.0
DME (Excluding Planning) Costs:	\$50.3	\$0.6	\$2.2	\$7.1
DME (Including Planning) Govt. FTEs:	\$4.6	\$0.3	\$0.7	\$0.7
Sub-Total DME (Including Govt. FTE):	\$56.3	\$0.9	\$2.9	\$7.8
O & M Costs:	\$13.5	\$4.7	\$5.0	\$5.1
O & M Govt. FTEs:	\$0.7	\$2.0	\$2.0	\$2.1
Sub-Total O & M Costs (Including Govt. FTE):	\$14.2	\$6.7	\$7.0	\$7.2
Total Cost (Including Govt. FTE):	\$70.5	\$7.6	\$9.9	\$15.0
Total Govt. FTE costs:	\$5.3	\$2.3	\$2.7	\$2.8
# of FTE rep by costs:	39	13	15	15
Total change from prior year final President's Budget (\$)		\$0.0	\$0.0	
Total change from prior year final President's Budget (%)		0.00%	0.00%	

2. If the funding levels have changed from the FY 2012 President's Budget request for PY or CY, briefly explain those changes:

## Section D: Acquisition/Contract Strategy (All Capital Assets)

Table I.D.1 Contracts and Acquisition Strategy

Contract Type	EVM Required	Contracting Agency ID	Procurement Instrument Identifier (PIID)	Indefinite Delivery Vehicle (IDV) Reference ID	IDV Agency ID	Solicitation ID	Ultimate Contract Value (\$M)	Type	PBSA ?	Effective Date	Actual or Expected End Date
Awarded		<a href="#">DTFAAC-09-C-00037</a>									
Awarded		DTFAWA-10-A-00049									
Awarded		DTFAWA-10-D-00052									

**2. If earned value is not required or will not be a contract requirement for any of the contracts or task orders above, explain why:**

Technology Refresh of COTS software and hardware does not have a requirement for EVM. In addition, all contracts associated with this work will be less than \$10M. The Savvion COTS CAS software is an enterprise-wide procurement, which all FAA organizations are able to leverage by purchasing seat licenses off of the negotiated price schedule. Integration services will be procured according to the FAA's Business Process Competency Center (BPCC) arrangement and may or may not require a separate contract or task order.

Exhibit 300B: Performance Measurement Report

Section A: General Information

Date of Last Change to Activities: 2012-08-23

Section B: Project Execution Data

Table II.B.1 Projects					
Project ID	Project Name	Project Description	Project Start Date	Project Completion Date	Project Lifecycle Cost (\$M)
A	IPDS Module 2, Release 1	Achieve Initial Operating Capability (IOC) for IPDS M2 R1 (R2.0).			
B	IPDS Module 2, Release 2	Achieve software delivery for Integration Testing of IPDS M2 R2 (R2.1).			
C	COTS Workflow Software Phase 1 Tech Refresh	Redesign AeroNav Products' Business Process Workflow automation using new FAA enterprise-wide COTS software to reach Phase 1 IOC.			
D	AeroNav Products Workflow System (APWS)	Business Management Workflow System.			

Activity Summary								
Roll-up of Information Provided in Lowest Level Child Activities								
Project ID	Name	Total Cost of Project Activities (\$M)	End Point Schedule Variance (in days)	End Point Schedule Variance (%)	Cost Variance (\$M )	Cost Variance (%)	Total Planned Cost (\$M)	Count of Activities
A	IPDS Module 2, Release 1							

## Activity Summary

Roll-up of Information Provided in Lowest Level Child Activities

Project ID	Name	Total Cost of Project Activities (\$M)	End Point Schedule Variance (in days)	End Point Schedule Variance (%)	Cost Variance (\$M )	Cost Variance (%)	Total Planned Cost (\$M)	Count of Activities
B	IPDS Module 2, Release 2							
C	COTS Workflow Software Phase 1 Tech Refresh							
D	AeroNav Products Workflow System (APWS)							

## Key Deliverables

Project Name	Activity Name	Description	Planned Completion Date	Projected Completion Date	Actual Completion Date	Duration (in days)	Schedule Variance (in days )	Schedule Variance (%)
C	AeroNav Products Charting Workflow Requirements Analysis	Conduct Joint Application Design (JAD) sessions to fully document AeroNav Products' Charting business process workflow requirements – Deliverable: Signed 'Charting' Workflow Requirements document	2011-11-30	2012-01-31	2012-01-31	182	-62	-34.07%
C	AeroNav Products Enroute Workflow Requirements Analysis	Conduct Joint Application Design (JAD) sessions to fully document AeroNav Products' Enroute business process workflow requirements – Deliverable: Signed 'Enroute' Workflow Requirements document	2012-06-30	2012-06-30	2012-06-29	179	1	0.56%
D	Workflow Business Management System	Design screens and process flows,	2012-11-01	2012-11-01		184	0	0.00%



Key Deliverables								
Project Name	Activity Name	Description	Planned Completion Date	Projected Completion Date	Actual Completion Date	Duration (in days)	Schedule Variance (in days )	Schedule Variance (%)

Design technical architecture

## Section C: Operational Data

Table II.C.1 Performance Metrics

Metric Description	Unit of Measure	FEA Performance Measurement Category Mapping	Measurement Condition	Baseline	Target for PY	Actual for PY	Target for CY	Reporting Frequency
Instrument Flight Procedure (IFP) production error rate, measured per publication cycle	Percent	Technology - Quality Assurance	Under target	1.000000	1.000000	1.100000	1.000000	Semi-Annual
Number of WAAS IFPs published to the NAS each year	Number	Customer Results - Service Accessibility	Over target	500.000000	500.000000	503.000000	500.000000	Semi-Annual
Number of IFP Charting Workflow requirements configured and tested in new COTS workflow software	Percent	Process and Activities - Productivity	Over target	0.000000	0.000000	0.000000	75.000000	Quarterly
Number of Enroute IFP Workflow requirements configured and tested in new COTS workflow software	Percent	Technology - Efficiency	Over target	0.000000	0.000000	0.000000	50.000000	Monthly
Number of Terminal IFP Workflow requirements documented	Percent	Customer Results - Service Coverage	Over target	0.000000	0.000000	0.000000	75.000000	Quarterly